

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.- 43. (Cancelled)

44. A method of performing a half-plane membership test for a pixel, comprising the steps of:

calculating an edge function for a first pixel of a patch, the first pixel having a first offset and being in the half-plane;

calculating a second offset for a second pixel of the patch;

comparing the first offset and the second offset to determine if the second pixel is in the half-plane.

45. The method of claim 44, wherein if the second offset is greater than the first offset, the second pixel is in the half-plane.

46. The method of claim 44, wherein the position of a third pixel of the patch is stated as an offset from a nearest one of a plurality of reference points.

47. The method of claim 46, wherein at least one of the plurality of reference points is in an adjacent patch.

48. The method of claim 46, wherein a first reference point of the plurality is the first pixel.

49. The method of claim 44, wherein the second offset is the negative of the first offset, and wherein the second offset is calculated using 2's complement arithmetic by inverting the bits of the first offset and adding one.

50. A method of performing a half-plane membership test for a pixel, comprising the steps of:

calculating an edge function for a first pixel of a patch, the first pixel having a first offset and being in the half-plane;

calculating a second offset for a second pixel of the patch;

wherein the second offset is the negative of the first offset, and wherein the second offset is calculated using 2's complement arithmetic by inverting the bits of the first offset and adding one.

51. The method of claim 50, wherein if the second offset plus one is greater than the value of the first offset, the second pixel is in the half-plane.

52. The method of claim 50, wherein the position of a third pixel of the patch is stated as an offset from a nearest one of a plurality of reference points.

53. The method of claim 52, wherein at least one of the plurality of reference points is in an adjacent patch.

54. The method of claim 52, wherein a first reference point of the plurality is the first pixel.

55. The method of claim 50, wherein the second offset is the negative of the first offset, and wherein the second offset is calculated using 2's complement arithmetic by inverting the bits of the first offset and adding one.

56. A method of performing a half-plane membership test for a pixel, comprising the steps of:

calculating an edge function for a first pixel of a patch, the first pixel having a first offset and being in the half-plane;

calculating a second offset for a second pixel of the patch;

wherein the second offset is the negative of the first offset, and wherein the second offset is calculated using 2's complement arithmetic by inverting the bits of the first offset; and

comparing the first offset with the second offset, wherein if the second offset is greater than or equal to the first offset, the second pixel is in the half-plane.

57. The method of claim 56, wherein the position of a third pixel of the patch is stated as an offset from a nearest one of a plurality of reference points.

58. The method of claim 57, wherein at least one of the plurality of reference points is in an adjacent patch.

59. The method of claim 57, wherein a first reference point of the plurality is the first pixel.

60. The method of claim 56, wherein the second offset is the negative of the first offset, and wherein the second offset is calculated using 2's complement arithmetic by inverting the bits of the first offset and adding one.